

## AGRICULTURAL VALUE CHAIN FINANCING AND SMALL SCALE FARMERS IN NIGERIA: THE PRE-REQUISITES

By

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### *Abstract*

*A value chain is a connected string of companies, groups and other players working together to satisfy market demands for a particular product or group of products. In recent times, Financial Institutions are more interested in financing various actors along the value chain, with emphasis on cash flow rather than any form of collateral. Value chain approach to agribusiness financing considers the market first and assesses the level of development of the value chain. However, in Nigeria as in most other Sub-Saharan African countries where agriculture is still characterized by small scale producers and disjointed agricultural value chains, a lot still needs to be done to be able to achieve success with the concept of value chain financing in the bid to transform the agricultural sector and accelerate economic development. One of the pre-requisites for making the concept of agricultural value chain financing work efficiently in Nigeria where over 90 percent of agricultural output in the country is produced by small-holders with less than 2 hectares under cropping is connecting farmers to markets.*

**Keywords:** Agricultural Transformation, Value Chain Financing, Small Scale Farmers, Economic Development.

### **I. INTRODUCTION**

Nigeria has a large expanse of agricultural land. This constitutes 77.7 per cent of Nigeria's total land area which is 910.8 thousand square kilometres. Of this total, 37.3 per cent is arable land, 7.4 per cent is under permanent crop and 9.0 percent is under forest (World Bank, 2016). Therefore, substantial land is still available for agricultural activities. Most importantly, Nigeria's agriculture is diverse, presenting various opportunities. It includes four sub-sectors, namely; crop, livestock, fishery and forestry. The crop sub-sector accounts for about 90.0 per cent of agricultural production in Nigeria, followed by the livestock sub-sector which contributes about 7.0 per cent. Fishing activities contribute about 2.0 per cent and forestry activities account for about 1.0 per cent (See Appendices I and II). The Nigerian agricultural sector remains the mainstay of the economy contributing about one quarter of the

country's gross domestic product (GDP) and providing means of livelihood for the bulk of the population (70 per cent, NBS, 2009).

However, majority of the farming population are small-holders with less than 2 hectares under cropping, yet accounting for over 90 percent of agricultural output in the country. They still rely mainly on rain fed farming, characterized by low use of modern/improved farm inputs (seeds, fertilizer, pesticides, etc.) and poor access to credit. Consequently, yields are still very low. Thus, Nigeria remains a food-deficit country blessed as it is with abundant agro-ecological resources and diversity. High import dependency persists. Food and live animal import grew by 65.25 per cent from N676. 91 billion in 2013 to N1,118.61 billion in 2014, which constituted 15.47 per cent of total imports in 2014 (NBS, 2014). Food and Agricultural Organization of the United Nations (FAO) has estimated Nigeria's cereal import (mostly rice and wheat) for 2015 at over 7.5 million tonnes and, Nigeria is said to be the largest rice importer in Africa.

Though, Nigerian agriculture has high potential but actualizing it depends on concerted efforts to address the major challenges confronting the sector which include among others; access to finance by small scale farmers. This paper therefore, focuses on the agricultural financing policy of the Nigerian government; in the bid to transform the agricultural sector to enable it contribute effectively to economic growth and development in Nigeria, and subsequently, transform the lives of the small scale farmers.

The paper is divided into five parts as follows: First is Section I above which is the Introduction. In Section II a brief description of the Characteristics of Nigerian agriculture will be presented as a background to the paper. Section III will review the Agricultural Financing Initiatives Directed at the Small Scale farmer in Nigeria over the years. In Section IV, the Concept of Agricultural Value Chain Financing and Efforts so far in Nigeria will be discussed. Section V will summarize and conclude the paper with Recommendations on the pre-requisites for agricultural value chain financing that will encompass the small scale farmers in Nigeria who constitute the majority.

## **II. CHARACTERISTICS OF NIGERIAN AGRICULTURE**

Nigerian agriculture evolved over the years mainly in response to the resource endowment of the country, the state of technological advancement and the cultural practices prevalent in the various communities. In addition, variations in climate, topography and soil types from region to region have encouraged ecological specialization in agricultural enterprise combinations and farming systems. The large population engaged in agricultural production and existing institutional arrangements especially, the land tenure system, to a large extent, determine the land use pattern, such that over the years, there has been excessive demand pressure on land with resultant fragmentation into small holdings. The estimated land per capita declined progressively from 1.858 hectares in 1961 to 0.20 hectares in 2013.

In Nigeria, peasant farmers and large scale commercial farmers co-exist. The former uses traditional methods and produce mainly for subsistence while, the latter employs modern inputs and management to optimise profit. Since the mid-1970s, many peasant farmers have taken advantage of various government incentives to improve upon the performance of subsistence farming to accommodate commercial

production. According to the classification of the National Bureau of Statistics (NBS), about 5 per cent of total agricultural output in Nigeria is produced by the modern sub-sector. Peasant agriculture therefore, predominates, accounting for about 95 per cent of the output as well as employment in the agricultural sector.

### **(a) Farming Systems**

In general, large scale farmers adopt modern farming systems such as mechanization, use of chemical as well as biological technology. However, the small holder farming system which predominates adopts numerous indigenous practices to overcome the problem of land fragmentation, environmental degradation and soil infertility. Consequently, farming systems such as shifting cultivation, crop rotation, mixed farming and mixed cropping are still in existence in Nigeria.

### **(b) Marketing**

It is recognized worldwide that an effective marketing system can be an incentive for increased production. However, marketing of agricultural commodities is far from being effective in Nigeria because of the absence of adequate market infrastructure like organized markets, grades and standards, transport, processing and storage facilities as well as unavailability of market information. This situation result in high post harvest losses and makes small scale farmers price takers and hence discourage expansion of production.

## **III. A REVIEW OF AGRICULTURAL FINANCING SCHEMES FOR SMALL SCALE FARMERS IN NIGERIA**

Various funding initiatives have been instituted to improve access of small scale farmers in Nigeria to long term funds in order to improve their performance and contribution to the economy. A review of these funding initiatives is presented below:

### **(i) Promotion of agricultural activities**

Through its Monetary Policy Circulars (before its abrogation in 1996), the CBN prescribed that not less than 15 per cent of commercial and 10 per cent of merchant banks' credit be granted to agricultural activities. The banks were also to allow grace periods on agricultural loans: one year for small-scale peasant farming, four years for cash crop farming, five years for medium and large-scale mechanized farming and seven years for ranching. However, with the deregulation of interest rates and removal of credit controls and allocative policies in 1996, the agricultural sector has had to compete for funds with other sectors of the economy from deposit money banks.

### **(ii) Promotion of rural banking**

To encourage banking habit nationwide and channel funds into rural development, the CBN introduced the Rural Banking Scheme in June 1977 in three phases - 1977-1980, 1980-1985 and 1st August, 1985 through 31st July, 1989. As at end of June 1992, 765 of the 766 branches stipulated by the CBN had been opened. Also, the

CBN stipulated that not less than 50 per cent of the deposits mobilized from the rural areas be advanced as credit to rural borrowers in view of the fact that rural financing is a veritable tool for poverty alleviation.

**(iii) The Nigerian Agricultural and Co-operative Bank (NACB), now Bank of Agriculture (BOA)**

The NACB was established in 1972 to assist in financing viable agricultural projects and thus enhance the level and quality of agricultural production. It sourced funds from government subventions, credit shortfall on agricultural loans through the CBN and loans from international finance institutions such as the International Bank for Reconstruction and Development (IBRD), African Development Bank (ADB), European Investment Bank (EIB), and the International Fund for Agricultural Development (IFAD). Due to NACB's unimpressive performance in recent years, it was merged with two other institutions, the Peoples Bank of Nigeria (PBN) and the Family Economic Advancement Programme (FEAP) in October 2000, to become the Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB).

It (NACRDB) is jointly owned by the Federal Ministry of Finance Incorporated (MOFI) and the Central Bank of Nigeria (CBN) with a shareholding ratio of 60% and 40% respectively. The primary aim is to finance agriculture as well as small and medium enterprises. On the successful completion of the restructuring programme, the Board of Directors approved appropriate Credit Guidelines for the Bank. Consequently, the Bank embarked upon full-scale loan approvals and disbursement to empower its clientele and give financial succour to the agriculture sector. Equally important is the fact that in establishing NACRDB, the Federal Executive Council (FEC) directed that the Bank should provide micro and macro credit facilities for all agricultural activities and only micro credit for non-agricultural projects. While micro credit facilities account for 70%, the balance of 30% is for macro-credit facilities. The NACRDB has been renamed Bank of Agriculture (BOA).

**(iv) The Agricultural Credit Guarantee Scheme Fund (ACGSF)**

The Agricultural Credit Guarantee Scheme Fund (ACGSF) was established in 1977 and it took off in April, 1978 under the management of the CBN, while a Board of Directors was constituted for policy making. The scheme was designed to encourage banks to increase lending to the agriculture sector by providing some form of guarantee against risks inherent in agricultural lending. In case of default, the lending banks are expected to exhaust all legal means of loans recovery, including realisation of any security pledged for loan, before the ACGSF pays 75 per cent of guaranteed loans in default.

The authorised capital of the Fund which had remained at ₦100.0 million from inception was reviewed upward to ₦3.0 billion in 1999. In view of the prevailing inflation and high cost of inputs, the loan limit under the scheme was raised from ₦5,000.00 to 20,000.00 for unsecured loans, and from ₦100,000.00 to ₦500,000.00 for secured loans to individuals, as well as from ₦1.0 million to ₦5.0 million for corporate borrowers.

#### **(v) People's Bank of Nigeria**

The People's Bank of Nigeria (PBN) was established by the Federal Government in 1988 with an initial take-off grant of N30 million to meet the credit needs of small borrowers who could not satisfy the stringent collateral requirements normally demanded by conventional banks. The bank was designed to cater for the credit needs of informal sector operators such as artisans and petty traders in both urban and rural areas. Thus, the bank was expected to facilitate access to credit for economic operators at the grassroots and thereby increase their self-reliance. The bank continued to depend on government subventions for its operations and this became unsustainable. It was merged with the NACB and FEAP to form the Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB), recently renamed Bank of Agriculture (BOA).

#### **(vi) Community Banks (CBs)**

These were established in 1990 with the objectives of providing effective financial services for the rural areas as well as micro-enterprises in the urban centres. Community banks in Nigeria were self-sustaining financial institutions owned and managed by local communities such as community development associations, town unions, cooperative societies, farmers' groups, social clubs, etc to provide financial services to the respective communities. They were to promote rural development and enhance economic growth and development at the grassroots level. Their activities complemented those of rural bank branches and branches of the People's Bank of Nigeria. They accepted deposits, provided ancillary banking services, invested their funds in various money market instruments and provided credit facilities to their customers.

They were not spared the distress in the financial sector. Consequently, placements amounting to N500 million were trapped in the distressed banks. Other problems that the community banks faced included incompetent Board and management, poor record keeping, insufficient assets to meet obligations, and inadequate earnings. Subsequently, the viable ones were converted to Microfinance Banks with the launch of the Microfinance Policy Document in 2006.

#### **(vii) Microfinance Banks (MFBs)**

Microfinance banks (MFBs) are financial institutions that provide diversified, affordable and dependable financial services to the active poor, in a timely and competitive manner that would enable them to undertake and develop long-term, sustainable entrepreneurial activities. They mobilize deposits mainly from the low income group and extend small loans to people, businesses, and organizations.

The Microfinance Policy, Regulatory and Supervisory Framework was launched by the President and Commander – in- Chief of the Armed Forces of the Federal Republic of Nigeria on December 15, 2005. It is aimed at strengthening the financial institutions serving the economically active poor, to make the poor self-reliant by increasing their access to factors of production such as diversified financial services on a sustainable basis, for job and wealth creation, and poverty reduction. This will enable the potentials of the numerous micro, small and medium enterprises use their economic potentials and latent entrepreneurial capacity to contribute to growth and development towards enthroning a private sector-led economy in Nigeria. The Policy

is also expected to enhance the supervisory responsibilities of the CBN to the lower end of the market. The policy is also focused on creating a platform for the establishment of microfinance banks and improving the regulatory/supervisory skills of the CBN.

The specific objectives of the microfinance policy are to:

- (1) Make financial services accessible to a large segment of the potentially productive Nigerian population who otherwise have little or no access to financial services
- (2) Promote synergy and mainstreaming of the informal sub-sector into the national financial system
- (3) Enhance service delivery by microfinance institutions to micro, small and medium entrepreneurs
- (4) Contribute to rural transformation
- (5) Promote linkage programmes between universal/development banks, specialised institutions and microfinance banks.

Two categories of microfinance banks (MFBs) that can be established are:

- (1) MFBs licensed to operate as a unit bank (a.k.a community bank)

MFBs licensed to operate as a unit bank with a minimum capital requirement of N20 million.

- (2) MFBs licensed to operate in a state

MFBs licensed to operate in a state with a minimum capital requirement of N1 billion. Organic growth of the two categories of MFB license will be encouraged to ensure national coverage.

In 2006, CBN received forty (40) applications for MFB licenses from new investors, 1 application for the transformation of an existing NGO-MFI and 144 applications for conversion from existing CBs, while 381 other existing CBs submitted their conversion plans.

By 2009 over 700 MFBs had been licensed in Nigeria and many applications were awaiting processing at the CBN. Currently, there are about 825 MFBs in Nigeria. They are under the supervision of the Central Bank of Nigeria (CBN) and the Nigerian Deposit Insurance Scheme (NDIC).

#### **(viii) PERFORMANCE INDICATORS FOR SMALL SCALE FARMER'S CREDIT ACCESS**

##### **(a) Commercial Banks**

Sectoral distribution of commercial banks loans and advances in Nigeria between 1981 and 2013 indicated that 9.13 per cent of their total loans and advances went to the agriculture and forestry sub-sector, which is rather small considering the fact that the agricultural sector contributes about a quarter of Nigeria's gross domestic

product (GDP), and provides livelihood for over 70 per cent of the population who produce over 90 per cent of the food consumed in the country.

Similarly, the proportion of commercial banks loans to small scale enterprises has dwindled from 27.0 per cent in 1992 to 0.10 per cent in 2013 due to banks' preference for lending to large scale businesses.

In addition, analysis of weighted average deposit and lending rates of commercial banks in Nigeria between 1981 and 2013 showed that savings rate averaged 7.90 per cent while prime and maximum lending rates averaged 17.68 per cent and 20.91 per cent respectively, which obviously does not favour the agricultural sector.

Finally, distribution of commercial bank's branches in Nigeria between 1981 and 2004 revealed that about 70 per cent are in the urban areas, while the rural areas where farmers reside have only 30 per cent of bank branches, which further constrain their access to credit. Lagos which is a typical urban city for instance, have over 1,500 bank branches, while typical agricultural states such as Ebonyi, Zamfara and Taraba have just 30 bank branches each.

### **(b)Microfinance Banks**

Sectoral distribution of loans and advances by Microfinance banks in Nigeria between 2009 and 2013 also indicated that agriculture was disenfranchised as it garnered only 6.81 per cent of total loans while commerce got the lion's share of 48.93 per cent (fig. 1).

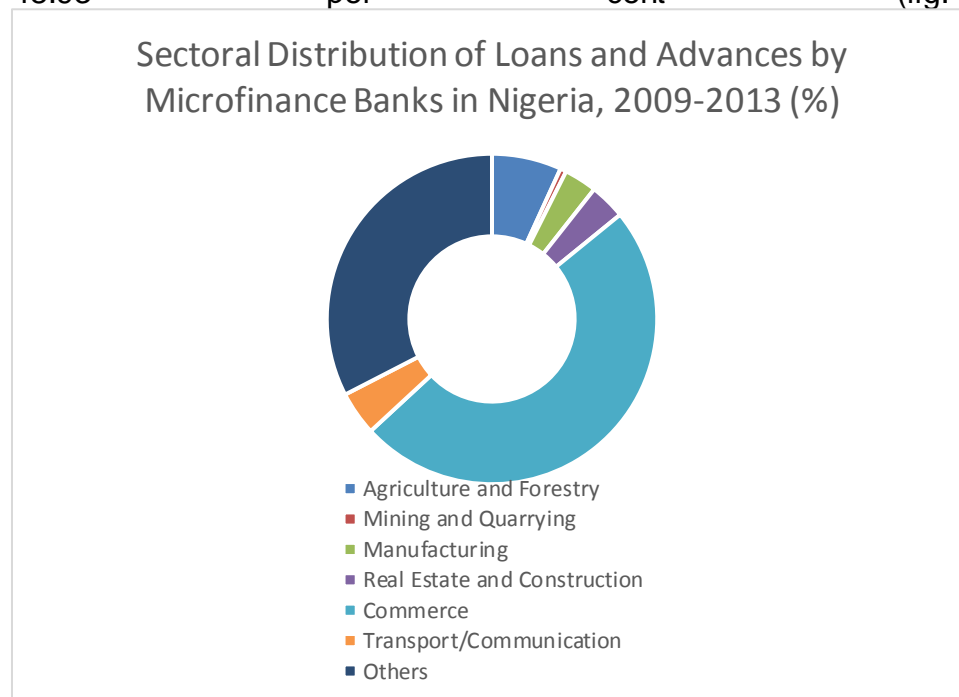


Fig. 1.

### **(c) Agricultural Credit Guarantee Scheme Fund**

Cumulative loans guaranteed under the Agricultural Credit Guarantee Scheme Fund (ACGSF) between 1981 and 2013 revealed that a total of 225,358 small scale farmers received a total N770,435.50 which amounted to an average of N3,418.72

per farmer. This category of farmers constituted 26.5 per cent of total number of farmers that received loans under the ACGSF, but the total amount they shared constituted only 1.09 per cent of total loans granted under the scheme. On the other hand, a total of 154,412 large scale farmers were granted a total of N48,697,094.40 which amounted to an average of N315,371.18 per farmer. Analysis of the ACGSF data reveal that this category of farmers constituted 18.16 percent of total number of farmers while the value of the loan that went to them constituted 68.29 per cent of total loans (Table 1). The implication is that small scale farmers are not well serviced with credit though they produce the bulk of the agricultural produce in the country.

**Table 1: Cumulative Loans Guaranteed Under the Agricultural Credit Guarantee Scheme Fund (ACGSF): 2009-2013**

<b>Category</b>	<b>N5,000&amp;below</b>	<b>N5,001-20,000</b>	<b>N20,001-50,000</b>	<b>N50,001-100,000</b>	<b>Above N100,000</b>
<b>Number</b>	225,358	142,844	195,190	132,581	154,412
<b>% of Total</b>	26.5	16.8	22.95	15.81	18.16
<b>Value</b>	770,435.50	2,174,030.40	7,836,409.70	11,176,119.80	48,697,094.40
<b>% of Total</b>	1.09	3.08	11.09	18.16	68.29
<b>Ave. Amount per Farmer</b>	3,418.72	15,219.61	40,147.60	84,296.54	315,371.18

**Source: Computed from Central Bank of Nigeria Annual Report and Statement of Account, 2013.**

#### **IV. THE CONCEPT OF AGRICULTURAL VALUE CHAIN FINANCING AND EFFORTS IN NIGERIA SO FAR**

##### **(i) The Concept of Agricultural Value Chain Financing**

A value chain is a connected string of companies, groups and other players working together to satisfy market demands for a particular product or group of products. Farming is only a small though important part of the agribusiness value chain. The value chain includes resource data processing, input provision, production, aggregating (covering bulking, cleaning and grading), processing and packaging, retailing and recycling. Making the value chain work efficiently involves connecting farmers to markets. Thus, a typical agricultural value chain is made up of the following: Input Dealers; Producers; Processors; Traders; and Consumers. Along the value chain, there is demand for different financial requirements and services. It could be demand for working capital which is a short to medium term loan or the demand for long term loan to acquire plant and machinery. There could also be demand for insurance services, export finance, and so on.

Examples of Agricultural Value chains in Nigeria that the small scale farmers can tap into are:



**(a) Cassava Value Chain.** This is made up of the Producers; the Processors and the Consumers. Currently, the small scale farmers constitute the bulk of the producers of cassava in Nigeria. This is taken off them by the processors who process fresh cassava into products like gari and fufu which are sold to local consumers (being a major staple food in Nigeria). We also have some commercial scale activities in the area of processing of cassava into animal feed for feeding ruminants, poultry and fishes (aquaculture). The processing of cassava into flour, starch and glucose for use in the industrial sector (such as food industry, the brewing industry, the pharmaceutical industry and the textile industry) is beginning to gain grounds. Potentially, new opportunities to explore in the cassava value chain include; on-farm/rural processing of cassava to into chips and ethanol production for both export and local markets.

**(b) Cotton Value Chain.** The cotton value chain constitutes; fibre production, spinning, weaving and knitting, dyeing and finishing, garment production and sale to consumers. The cotton value chain can be broken down into sub-value chains depending on its final product which serves as an input into another value chain. The product could be raw fibre which is obtained directly from the producers. It is then an input for the spinners whose product is yarn. This serves as input for the Weaving and knitting sector as well as the dyeing and finishing sector whose products are fabrics. The fabrics constitute the input for the garments industry. Thus, various financial requirements and services are required along the value chain.

**(c) Cattle Value Chain.** The cattle value chain is made up of the following: inputs; production; processing/distribution; marketing. The inputs component constitutes the feed, breeding and veterinary services which are required to produce the calf and cow for fattening and dairy. The output is processed into milk, beef, butter, cheese and leather. Marketing is done through local markets, restaurants, supermarkets, and even exports to reach the final consumers.

**(d) Rice Value Chain.** The rice value chain starts with paddy production which could go to cottage millers or Commercial mills for processing and straight to the domestic rice market for sale to consumers. There could also be sub-chains such as the farm gate buyers who supply the local paddy market, where the commercial mills can also buy to process.

**(e) Tomato Value Chain.** The tomato value chain is made up of the following: the producer who supplies the tomato paste factory that processes it and sells to local consumers and export market. Along the tomato value chain, there could be wholesalers who take the tomato off the producers and sell to retailers who sell fresh tomatoes to retailers. There could also be agents who buy fresh tomatoes from the producers or wholesalers and supply the tomato factory. Finally, we also have wholesalers/agents taking off the processed tomato paste from the factory and selling to retailers who eventually sell to the final consumers. To all of these actors, adequate finance is a critical factor for success.

## **(ii) Initiatives for Agricultural Value Chain Financing in Nigeria**

### **(a) Bank of Industry (BOI)**

The Bank of Industry has leveraged on the special intervention fund provided by the government for the agro-allied sector to fund some agricultural value chains in

Nigeria. Examples are the BOI's support for the processing of cocoa seeds to cocoa butter for export and cocoa cake and powder for local consumption. The beneficiary company is the Cocoa Ile-oluji, Ondo State. The loan amount is N1.512 billion in multiple loan facility. The second example is the processing of rice paddy to polished rice for local consumption. The beneficiary company is Ebony Agro Company, Abakaliki, Ebonyi State. The loan amount is N560 million. However, this is a far cry from the amount of financing required to transform the Nigerian agricultural sector. In addition, these loan facilities went to well established industries. Thus, the multitude of small scale farmers in Nigeria are left out.

### **(b) Nigeria Incentive-based Risk Sharing System for Agricultural Lending (NIRSAL)**

The Central Bank of Nigeria established the Nigeria Incentive-based Risk Sharing System for Agricultural Lending (NIRSAL) in 2010, following an agreement with the Alliance for a Green Revolution in Africa (AGRA), to address the weakness of existing agricultural financing schemes. It was an innovative mechanism for unlocking finance to serve the needs of all farmers, particularly smallholder farmers, agro-processors, agribusinesses as input suppliers in the agricultural value-chain. The aim was to provide farmers with affordable financial products while reducing the risk of loans to farmers offered by the financial institutions. The scheme would build the capacity of banks to lend to agriculture, deploy risk sharing instruments to lower risks of lending, and develop a rating scheme for banks based on their commitment to lending to the agricultural sector. On the completion of the framework in 2011, the scheme was formally launched. The five major components of NIRSAL are:

**(i) Risk Sharing Facility:** This will support the deployment of different risk sharing instruments to reduce the risk of lending by commercial banks to agriculture. This will include first-loss and shared-loss arrangements, depending on the volume of lending, the part of the value-chain that the bank wants to lend to, the term of lending and the type of bank, experience and capacity for agricultural lending.

**(ii) Insurance Component (IC):** This will identify existing insurable risks, existing solutions for coverage/assist in the development of such solutions and link such products to the loan provided by the banks to loan beneficiaries.

**(iii) Technical Assistance Facility (TAF):** This is to be used to support banks that have clearly demonstrated interest and verifiable commitment to entry into smallholder agricultural lending. The risk sharing fund and the technical assistance facility will be blended for banks to share risks and build capacity of banks to lend and build delivery platforms in support of agricultural lending. The technical assistance facility will also be used to build the capacity of smallholder farmers and assist them in managing market and financial activities.

**(iv) Bank Incentive Mechanism (BIM):** Banks that lend significantly to agriculture will be further incentivized. This will be done through lower guarantee fees for the use of the RSF and access to further capital for agricultural lending at a lower rate from the Central Bank to be able to lend more.

**(v) Agricultural Bank Rating System (ABRS):** This will be done by reputable independent parties to rate banks based on their performance in agricultural lending and impacts of the lending on food security, rural employment and incomes. The

independently-developed rating scheme will be used to differentiate banks. Banks with higher ratings will be further incentivized through the BIM to do more lending to the agricultural sector. The system will also have a dedicated monitoring and evaluation system to track impacts and effectiveness.

### **Selection of Commodity and Financial Value Chains for NIRSAL**

After due diligence, ten agricultural value-chains were selected for the country namely: cassava, cotton, fisheries, maize, fruits, oil palm, poultry, rice, soya beans and tomatoes.

NIRSAL is intended to strategically re-engineer Nigeria's agricultural finance landscape, decompose all existing initiatives into NIRSAL's five core components that will unlock the financing challenges of the country's agricultural sector.

### **Highlights of Achievements of the NIRSAL**

In 2013, the Board of the Central Bank of Nigeria approved N75.0 billion Seed Fund for NIRSAL, under a redeemable debenture with a coupon of 1.0 per cent.

As at end September 2015, the cumulative number/value of credit risk guarantees (CRGs) issued by NIRSAL stood at two hundred and forty seven (247) projects valued at N21.673 billion. Analysis of the CRGs by activity indicated that agro-processing projects accounted for 69.9 per cent, while livestock production, crop production and input distribution projects accounted for 15.6, 10.4 and 4.1 per cent, respectively. In addition, N300.516 million was paid as interest drawback to deserving beneficiaries. NIRSAL has also guaranteed N39.487 billion to 207 agro-dealers, under the Growth Enhancement Scheme of the Federal Ministry of Agriculture and Rural Development from inception to date. Cumulatively, total GES IDP paid to date stood at N439.084 million for 91 projects.

### **Challenges of NIRSAL**

Among the challenges of NIRSAL are;

- (i) Validity of information provided by counter parties for Credit Risk Guarantee, and
- (ii) Low public awareness and poor perception of NIRSAL.
- (iii) Non-payment of 50 per cent by Federal Ministry of Agriculture and Rural Development under the GES input supply scheme has triggered claim settlement by Counter parties.
- (iv) Delay in recruitment of substantive Managing Director and other supporting staff.

Going forward, the operators would want to ensure that guarantees are extended only to projects with fixed value chains. In addition, Credit Guarantee (CG) will now be issued on Face Value as against First Loss following the revision of the NIRSAL's Guidelines in May 2014.

These are indicators that the agricultural value chain in Nigeria is still disjointed and much more needs to be done to achieve the laudable objective of agricultural value chain financing in the bid to transform the agricultural sector, assure food security and poverty eradication.

## **V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### **Summary and Conclusions**

Nigerian agriculture has high potential but actualizing it depends on concerted efforts to address the major challenges confronting the sector which include among others; access to finance by small scale farmers. This problem has been compounded with the bank consolidation exercise that took place in the country in 2005 as banks' now prefer to lend to large scale businesses. In the past, the agricultural financing policy of the Nigerian government emphasized primary production without paying attention to the marketing of agricultural products. Consequently, the current emphasis by financial institutions on value chain financing has further compounded the problem of access to credit by small holders who account for over 90 per cent of agricultural production in Nigeria and do not have access to lucrative markets, nor adequate processing and storage facilities.

More worrisome, is the fact that the current efforts being made by government to develop value chains has been limited to only few crops, cattle and fish farming, whereas Nigerian agriculture is very diverse with over 25 crops possibilities namely, maize, millet, sorghum, rice, wheat, acha, cowpeas, cassava, potatoes, yam, cocoyam, plantain, assorted vegetables, melon, peanut, sesame, soya bean, cotton, oil palm, cocoa, rubber, sugar cane, kolanut, ginger, cashew, pineapple, and palm produce. Similarly, about seven livestock products are produced in the country namely, poultry, goat meat, mutton, beef, pork, milk, and eggs. In the fishery sub-sector, we have the artisanal and coastal brackish water catches, artisanal inland rivers and lakes catches and fish farming (see Appendices I and II).

Taking the value chain approach, the World Bank has estimated that Africa's agribusiness market will reach US\$1trillion in 2030. This estimate does not include auxiliary industries that will arise from the expansion of the sector. In order for the Nigerian economy to be a beneficiary of these positive externalities from value chain approach to agricultural financing the following recommendations are put forward.

### **Recommendations**

In order for agriculture to contribute to growth, employment and foreign exchange earnings now that the oil sector is in crisis, there is need for an action plan which gives the private sector bigger roles in the execution of development programmes. This must be complimented by deliberate and concerted efforts by the government to provide desired incentives and channels, increased public expenditure towards improved services and infrastructure. Some of the elements of an effective strategy for improving agricultural sector development in Nigeria are outlined as follows:

(a) Fostering an enabling environment that gives bigger role to the private sector, including co-operatives and grass root organizations. This calls for stabilization of exchange rates, trade policies, investing in infrastructure and public goods, tax incentives, etc., which can induce reasonable profit margins and stimulate growth. Farmers must be developed to make farming a business in whatever scale of enterprise of their choice.

(b) Promotion of widespread adoption of modern farm inputs. There is an urgent need to expand substantially the domestic supply of modern farm inputs such as fertilizers, improved seeds, agro-chemicals, irrigation pumps, improved livestock and fishery inputs, etc. through public/private sector partnership so as to achieve the desirable growth in consumption and yields.

(c) There is an urgent need to rehabilitate the research system through a preparation of a national research plan, increased and stable funding, proper co-ordination and guidance of research efforts, strengthening the linkages between research institutes with national universities and international/regional research centres as well as adequate training of both research scientists and technical support staff in specialized skills to be able to guide farmers properly.

(d) Improved extension service delivery to farmers is paramount to create awareness and assure effective use of improved inputs. Universal adoption of training and visit approach and increased use of women in extension service would be very beneficial. The emphasis should be to provide farmers with regular, systematic and up-to-date advice on resource management and on the cropping, livestock and fishing practices best suited to each area.

(e) In order to improve farmer's access to credit, modern approaches to agribusiness finance need to be embraced hence the need to develop more agricultural value chains to cover the array of crops, livestock, fishery and forestry possibilities in Nigeria. In recent times financial institutions are more interested in financing various actors along the value chain. Emphasis is more on cash flow rather than collateral. Risk mitigating factors such as warehouse receipts system, commodity exchange development, crop insurance and guarantee funds are useful. Also, farmers have to be financially literate.

(f) The need for adequate infrastructure to drive agricultural growth cannot be over emphasised. Adequate rural road network for quick evacuation of inputs and output, power for processing and storage including cold chain to increase value addition and improve shelf life and irrigation facilities to assure year round production and income, are prerequisites.

## REFERENCES

Akinwumi Adesina (2012): *Investing in Nigeria's Agricultural Value Chains*. Paper presented at the Bank of Industry's Nigerian Investment Forum, London, July, 2012.

Central Bank of Nigeria (2013): *Statistical Bulletin, December, 2013*, Abuja

Central Bank of Nigeria (2013): *Annual Report and Statement of Accounts for 2013*, Abuja

Central Bank of Nigeria (2014): Credit Delivery to Small and Medium Enterprises: Post Bank Consolidation in Nigeria. *Occasional Paper No. 53*. Real Sector Division, Research Department, CBN, Abuja, October 2014.

Ezekiel Oseni (2013): ***Agricultural Development: Optimising the Value Chain***. Bank of Industry, Lagos, Nigeria.

Federal Ministry of Agriculture (2001): ***The New Agricultural Policy for Nigeria***, 2001. Abuja.

Food and Agricultural Organization of the United Nations (2015): ***World Food Outlook, Nigeria Country Report***, Rome, Italy.

Joe Alegieuno (2010): Microcredit Financing by Deposit Money Banks/Microfinance Banks and the Agricultural Sector Development in Nigeria. *Central Bank of Nigeria Economic and Financial Review*, Vol. 48, No. 4, December 2010.

National Bureau of Statistics (2015): ***Nigeria's Gross Domestic Product, Fourth Quarter, 2014***, April, 2015. Abuja.

Paul N. Eluhaiwe (2010): The Central Bank of Nigeria Partnership with Alliance for Green Revolution in Africa (AGRA): Conceptual Issues, Operations and Prospects for Food Security in Nigeria. *Central Bank of Nigeria Economic and Financial Review*, Vol. 48, No. 4, December 2010.

The World Bank (2015): ***World Development Indicators, April 2015***, Washington DC.

## APPENDIX I

### Average Estimated Output of Major Crops in Nigeria (2009-2013)

Crop	Area Planted(M'Ha)	Output('000tonnes)	Yield(kg/ha)
Maize	8,464.34	15,289.96	1.81
Millet	6,045.96	10,429.33	1.72
Sorghum	9,309.50	14,713.82	1.58
Rice	33,356.48	5,721.22	0.45
Wheat	18.36	83.32	4.54
Acha	247.48	139.20	0.56
Cowpea	11,994.02	6,585.24	0.55
Cassava	5,322.30	55,834.72	10.49
Potatoes	286.34	2,367.34	8.26
Yam	4,016.60	39,774.62	9.89
Cocoyam	56,884.86	3,613.00	0.06
Plantain	137.04	1,779.72	12.96
Vegetables	1,671.54	7,566.60	4.53
Melon	452.18	733.98	1.62
Peanut	3,938.38	4,985.56	1.26
Sesame	91.90	177.53	1.93
Soyabean	2,901.86	2,248.69	0.77
Cotton	956.72	802.63	0.84

Oil Palm	115.10	325.21	2.83
Cocoa	1,210.36	315.25	0.26
Rubber	5.64	351.60	62.26
Sugarcane	170.78	3,280.82	19.21
Kolanut	129.06	114.73	0.89
Ginger	10.02	123.93	12.37
Cashew	6.64	30.36	4.56
Pineapple	1.74	5.13	3.04
Palm Produce	5.60	6.15	1.10

**Source: Computed from Central Bank of Nigeria Annual Report & Statement of Account, 2013.**

## APPENDIX II

### Average Estimated Output of Livestock, Fishery and Forestry Products in Nigeria (2009-2013)

Agricultural Commodity	Output
<b>Livestock Sub-sector('000 tonnes)</b>	
Poultry	172.06
Goat meat	764.15
Mutton	706.04
Beef	371.25
Pork	89.70
Milk	1,750.72
Eggs	800.69
<b>Fishery Sub-sector('000tonnes)</b>	
Artisanal Coastal and Brackish Water Catches	318.87
Artisanal Inland Rivers and Lakes Catches	304.27
Fish Farming	117.53
Industrial(Trawling) Coastal Fish and Shrimps	64.54
<b>Forestry Sub-sector ('000 cu. Meters)</b>	
Roundwood	170,504.20
Sawnwood	3,537.02
Wood Based Panel	244.15
Paper and Paper Products('000 metric tonnes)	42.73

**Source: Computed from Central Bank of Nigeria Annual Report and Statement of Account, 2013.**